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PEPTIDE

Ubiquitin: KVGSLARAGKVRGQTPK VAKQEKKKKKTGRAKRRMQYNRRFVNVVPTFGKKKGPNANS

(59aa, 6.654 kD)

(1-18, 2.153 kD) KVGSLARAGKVRGQTPK

(29-41, 1.910 kD) TGRAKRRMQYNRR

(18-29, 1.643 kD) KVAKEKKKKKT

(18-35, 3.477 kD) KVAKEKKKKKTGRAKRR

(18-35, 3.656 kD) AKVAKEKKKKKTGRAKRR

(29-35, 953 D) TGRAKRR

(42-59, 2.213 kD) FVNVVPTFGKKKGPNANS

(36-41, 957 D) MQYNRR

FIG. 1

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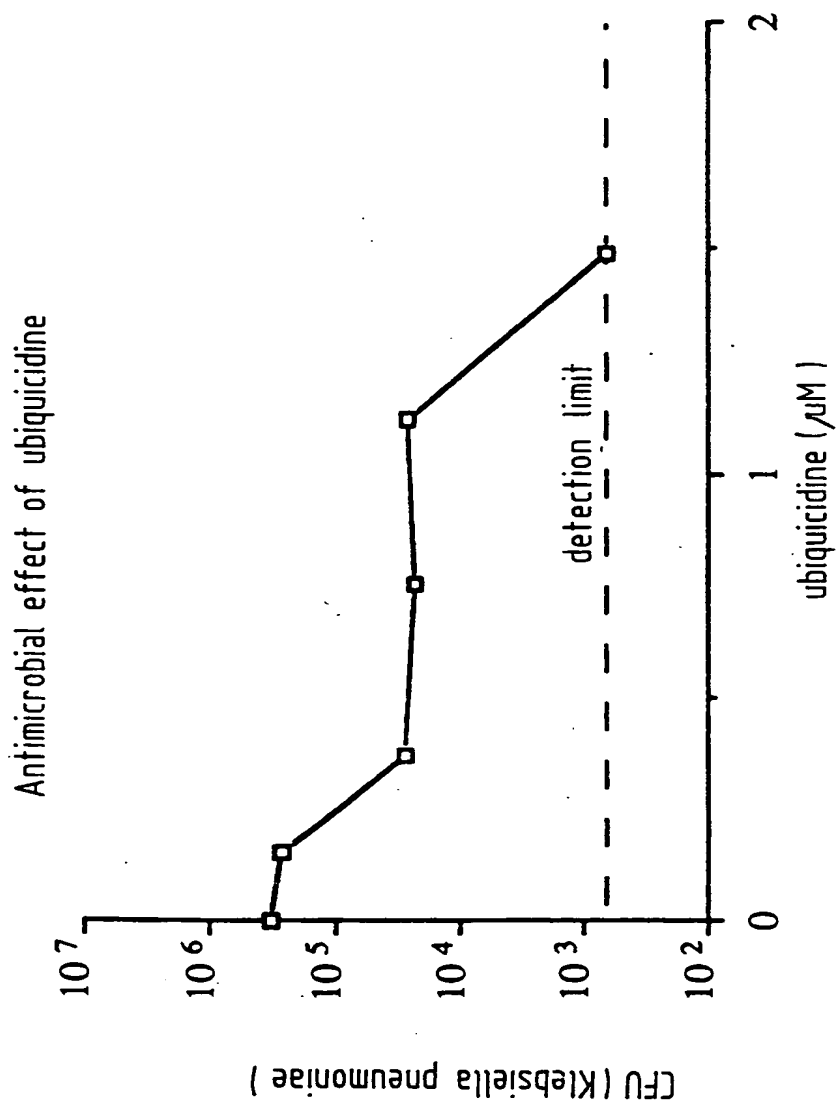
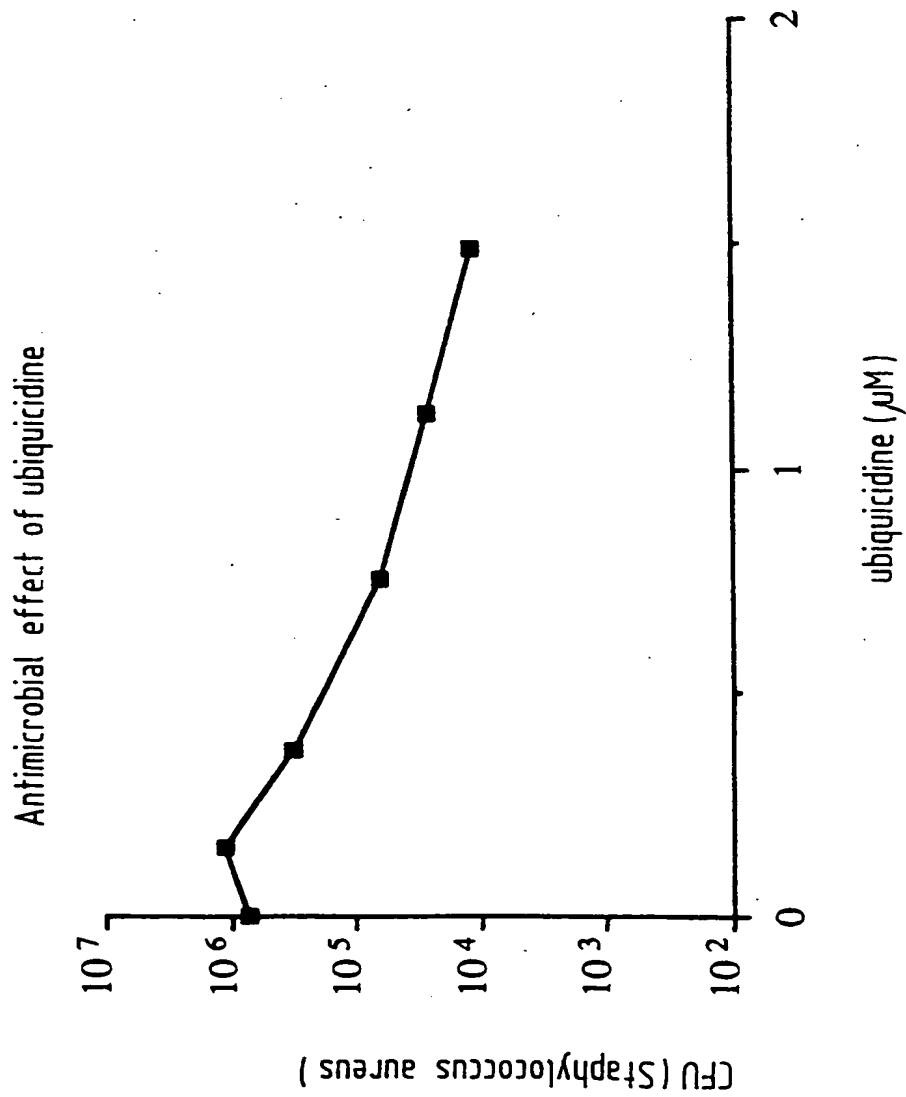


FIG. 2A

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FIG. 2B

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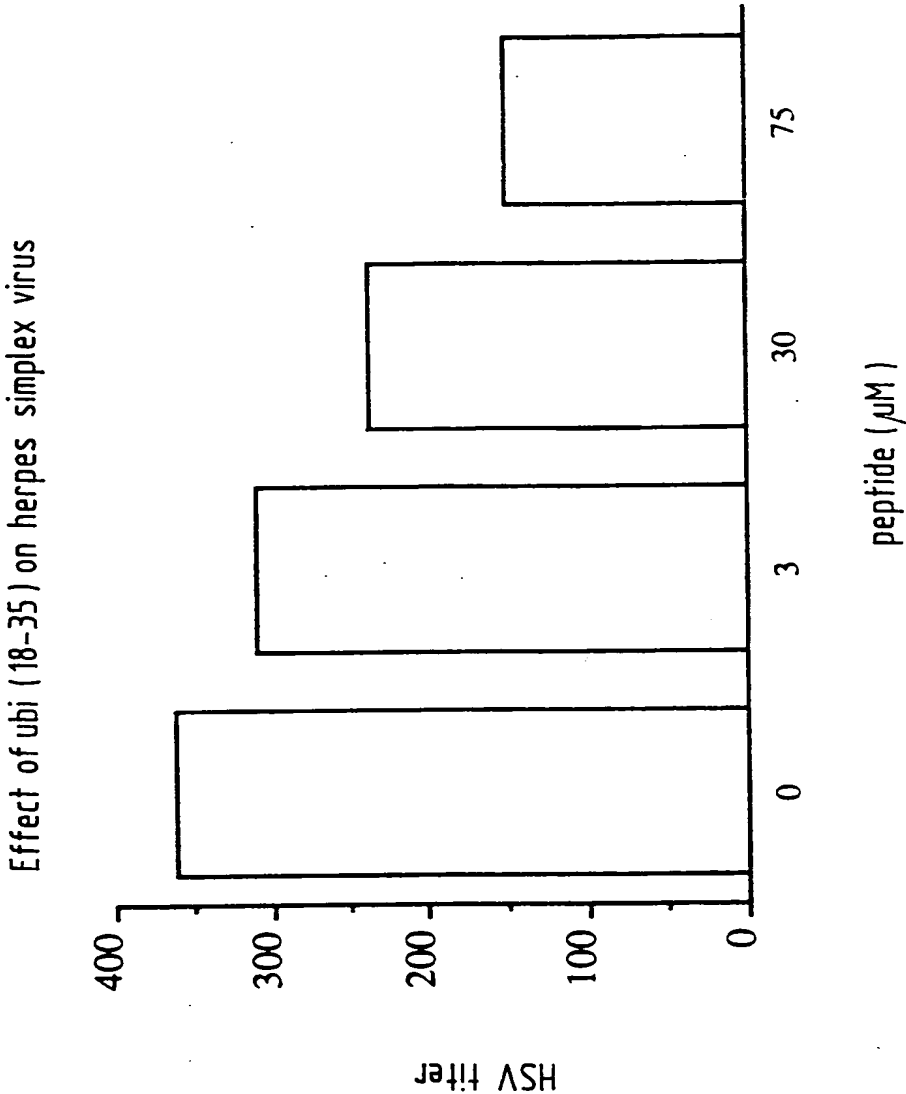


FIG. 3

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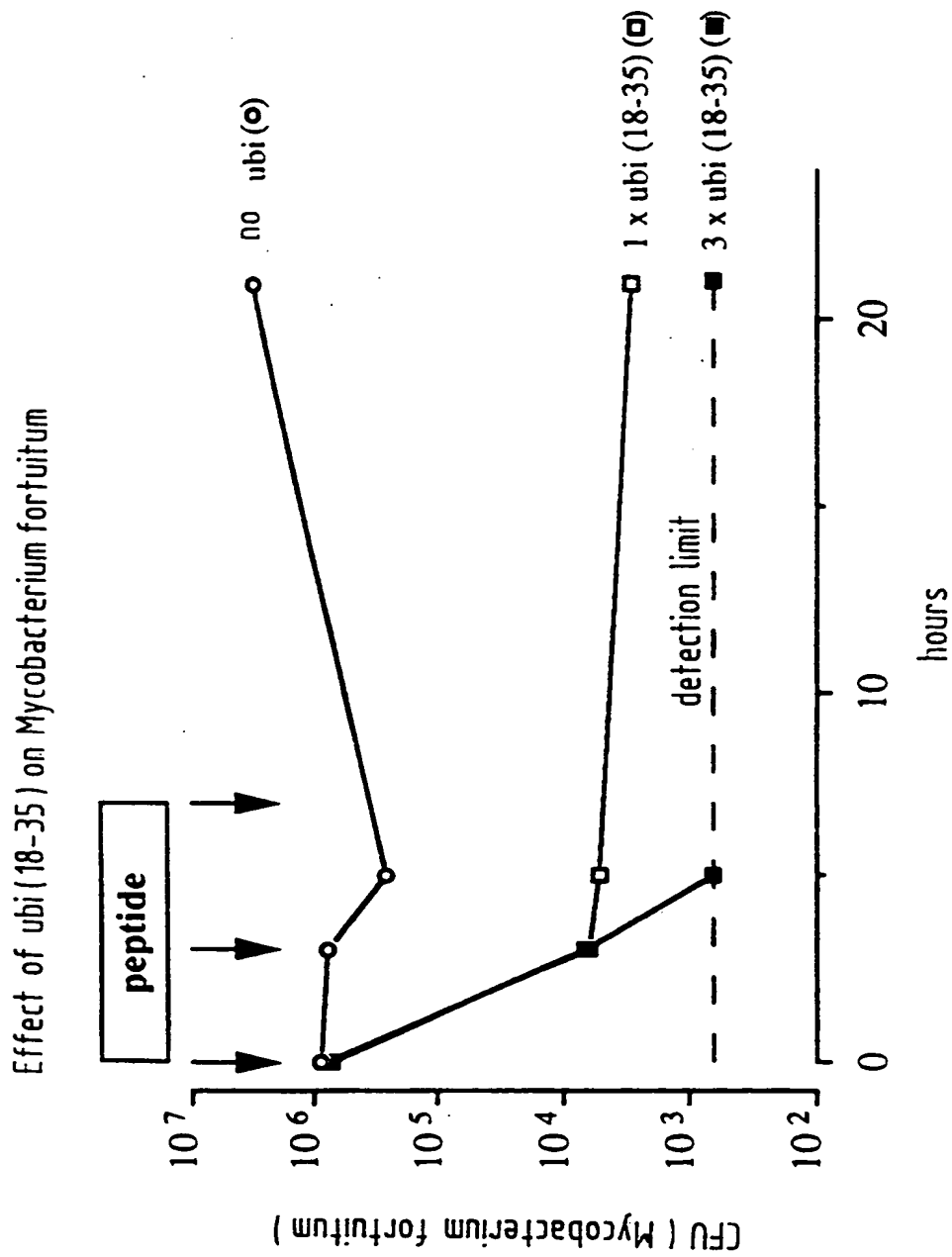


FIG. 4

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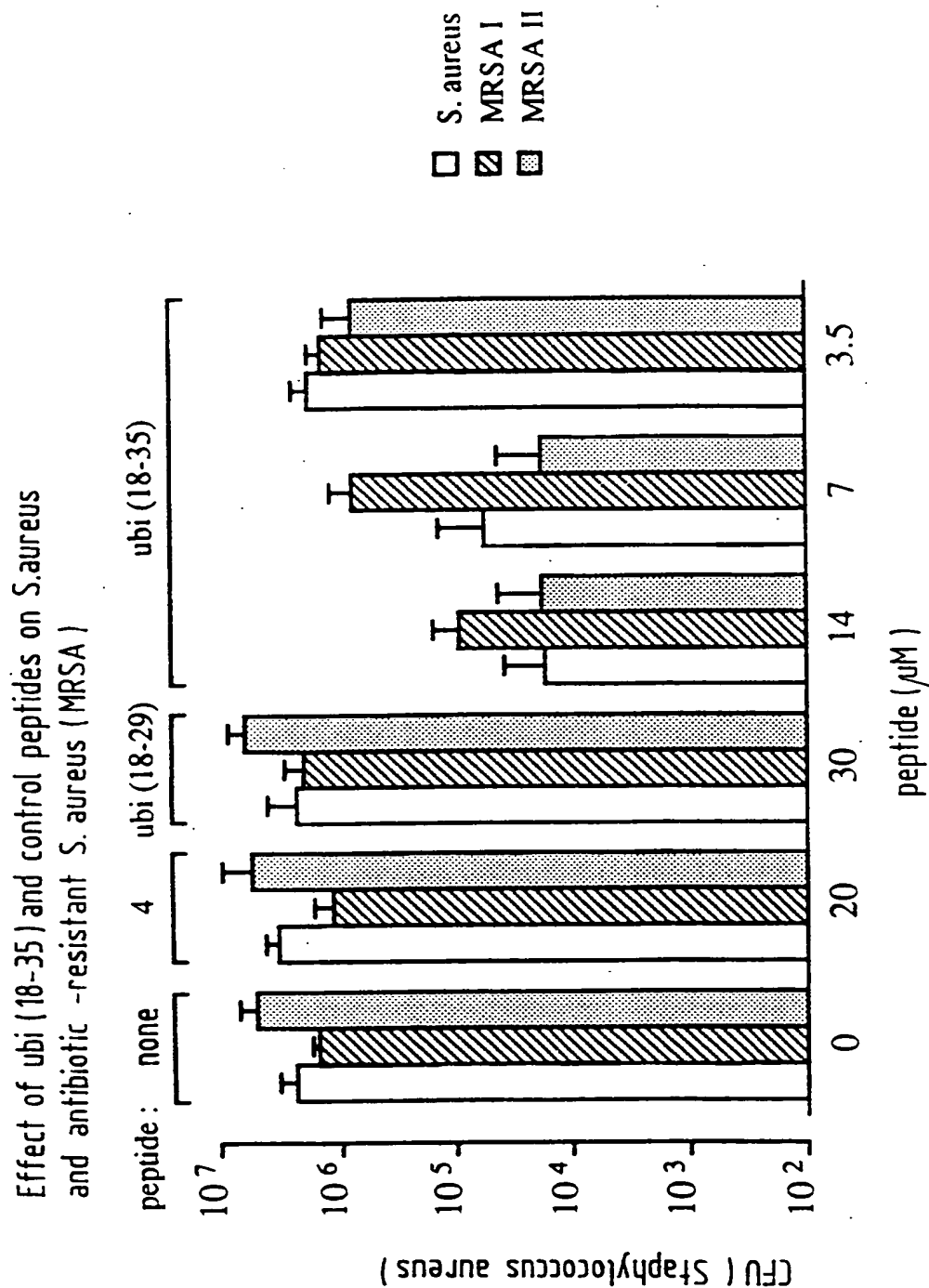


FIG. 5

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Effect of ubi (18-35) and D-ala-protected ubi (18-35)
on *Klebsiella pneumoniae*

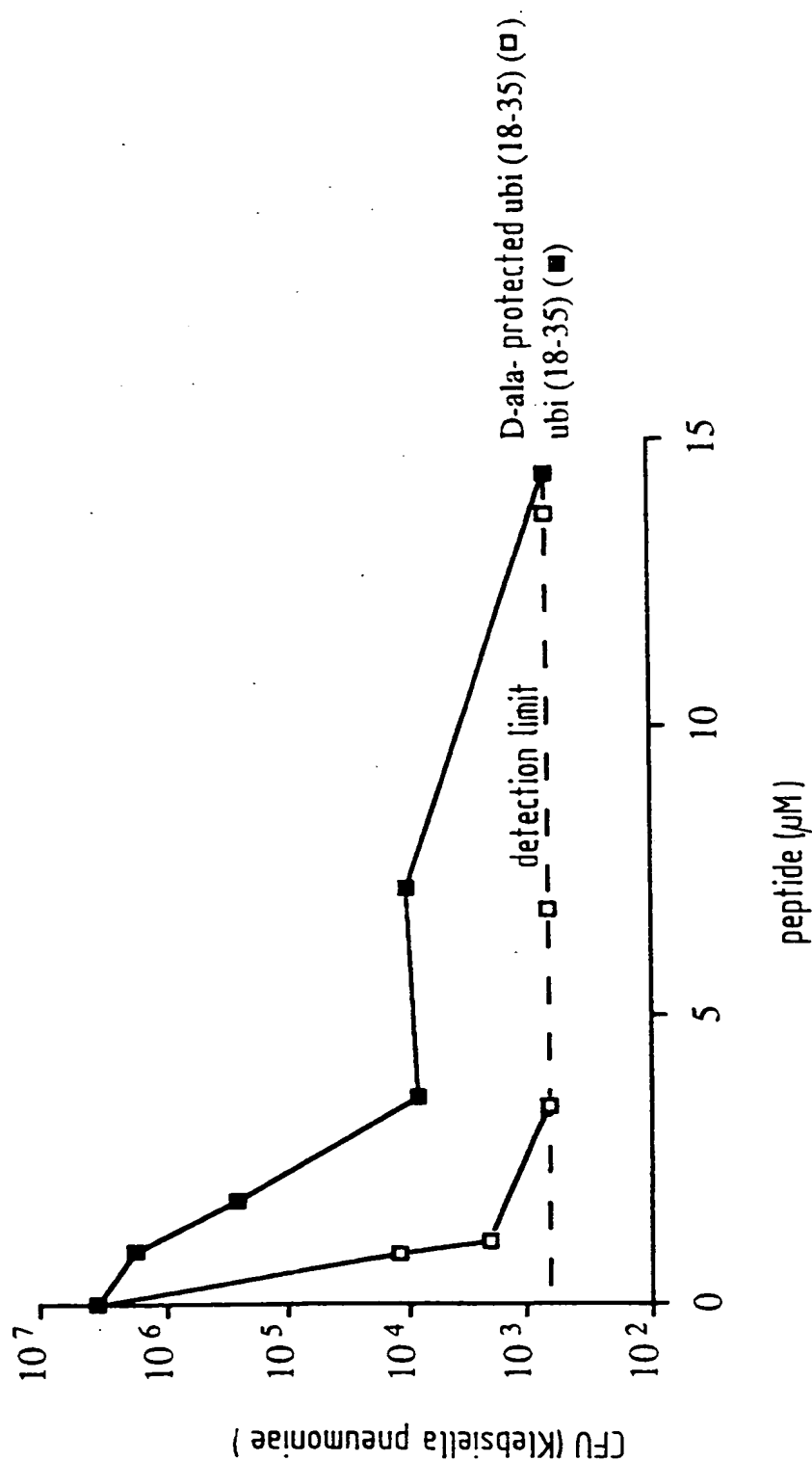


FIG. 6

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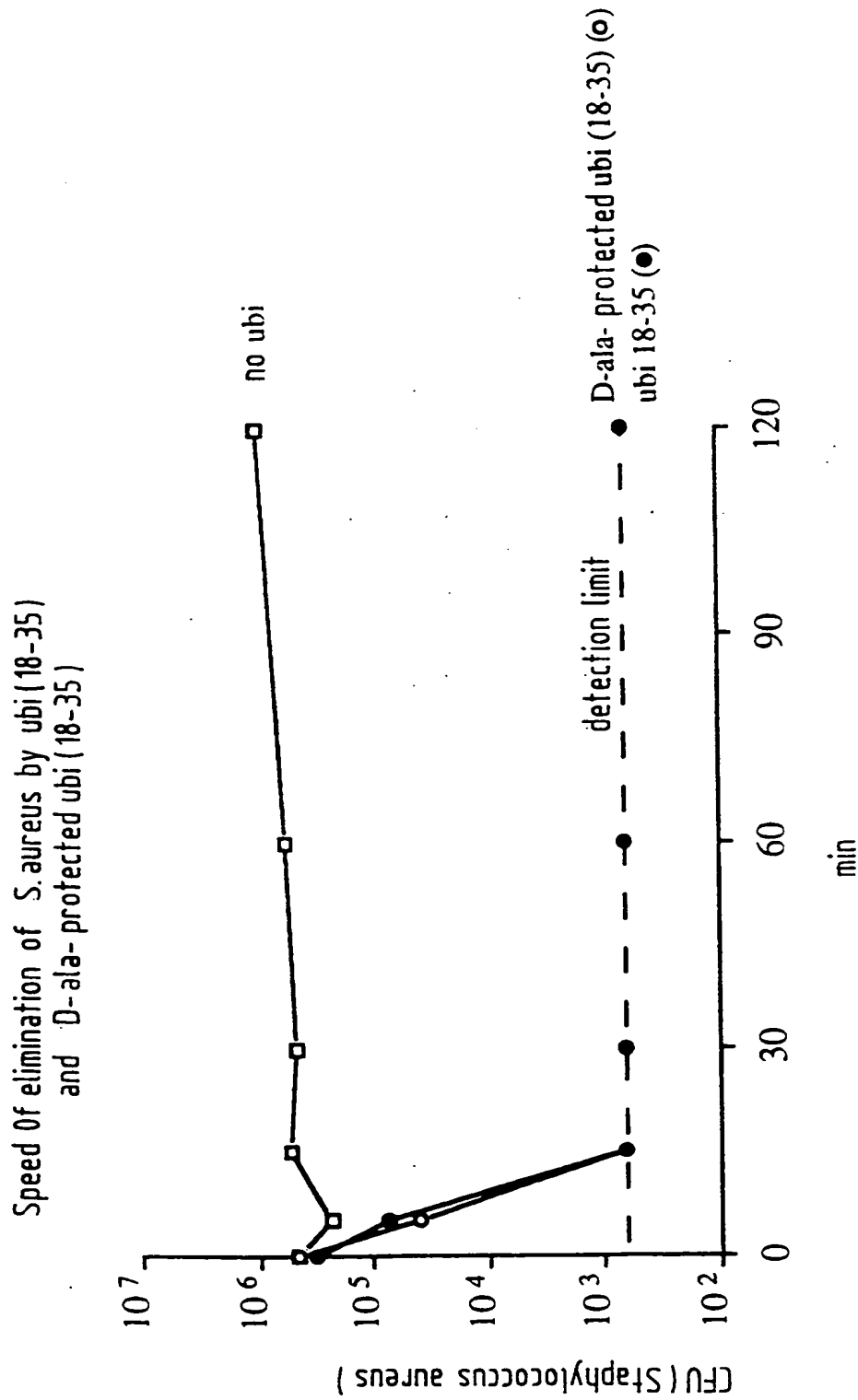


FIG. 7

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Effect of ubi (18-35) and D-ala-protected ubi (18-35) on *S. aureus* and antibiotic-resistant *S. aureus* (MRSA)

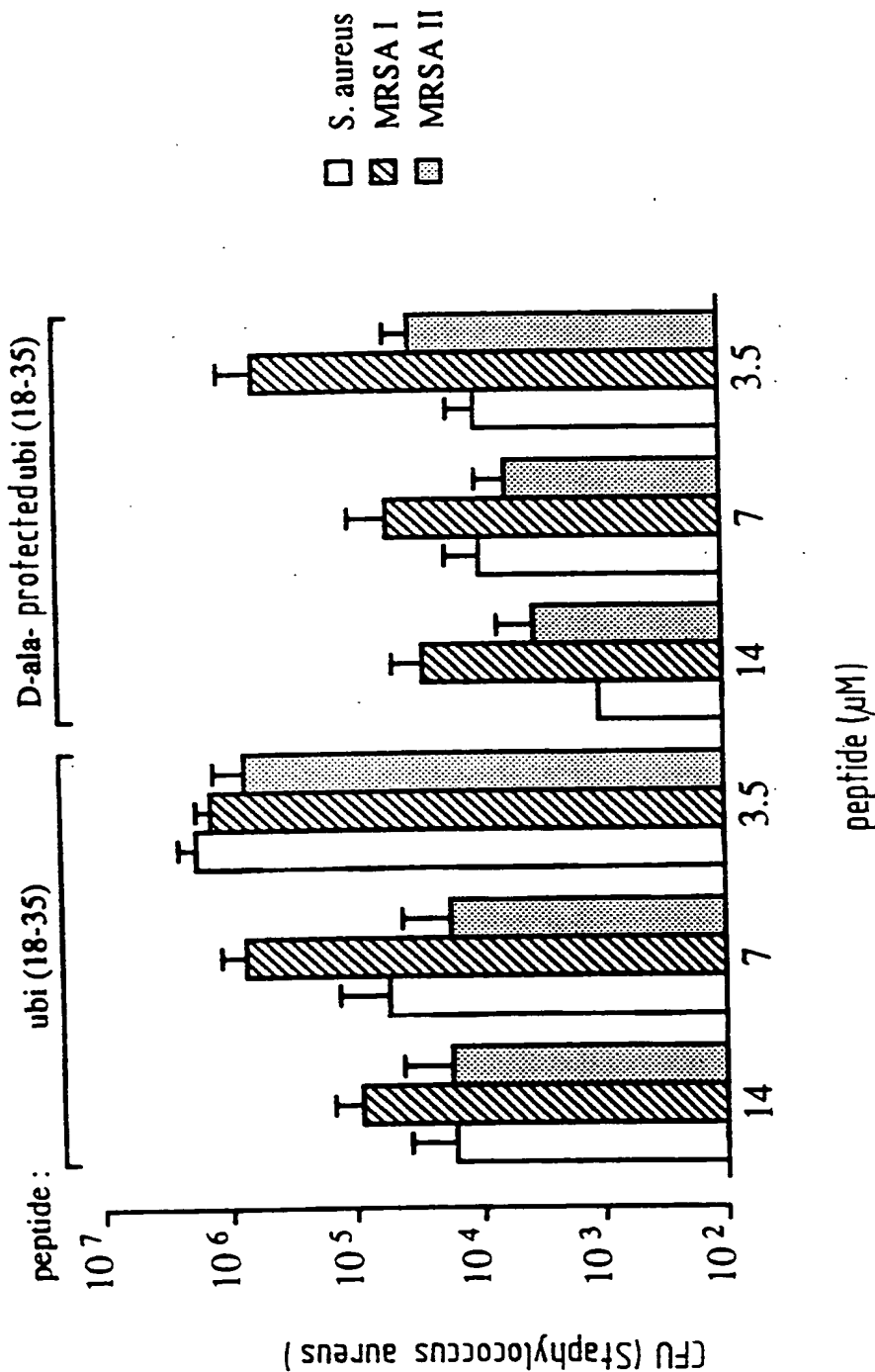


FIG. 8

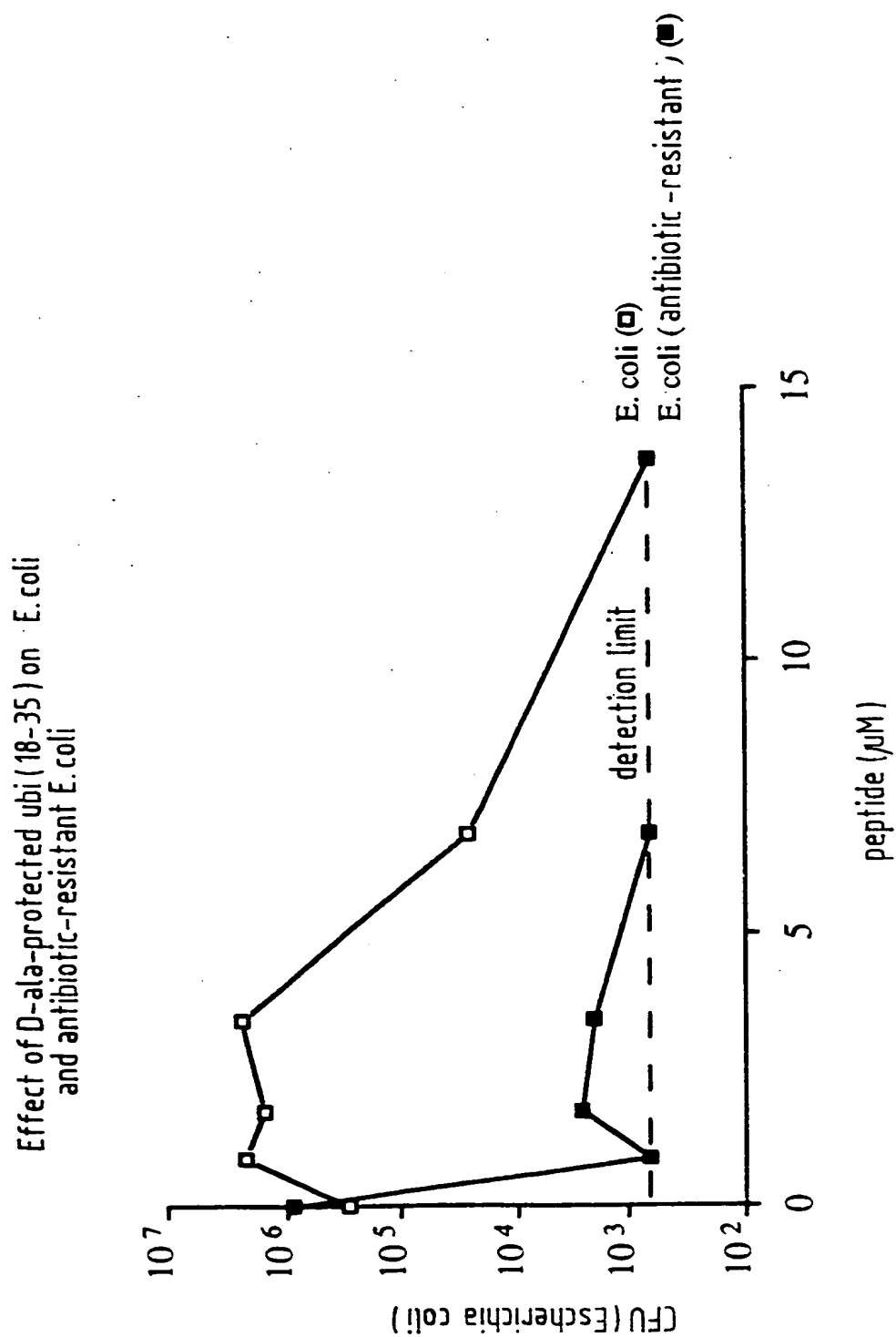
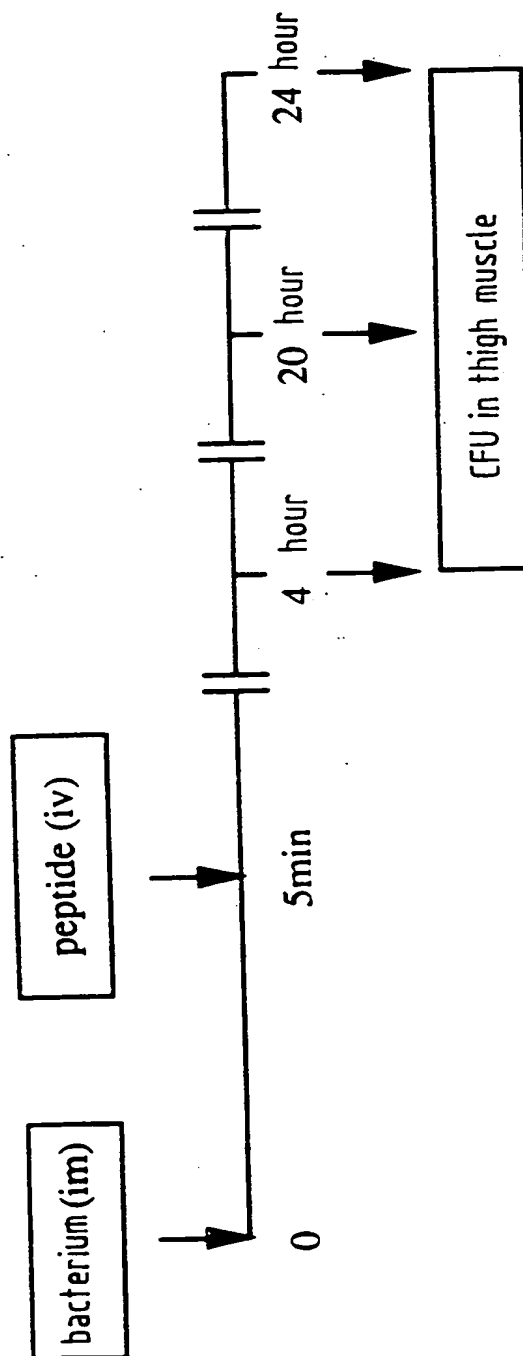


Fig. 9

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Infection model

FIG. 10

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Accumulation of ^{99m}Tc -labelled ubiquidine (18-35) in the thigh muscle infected by staphylococcus aureus ATCC 25923 after intraperitoneal injection

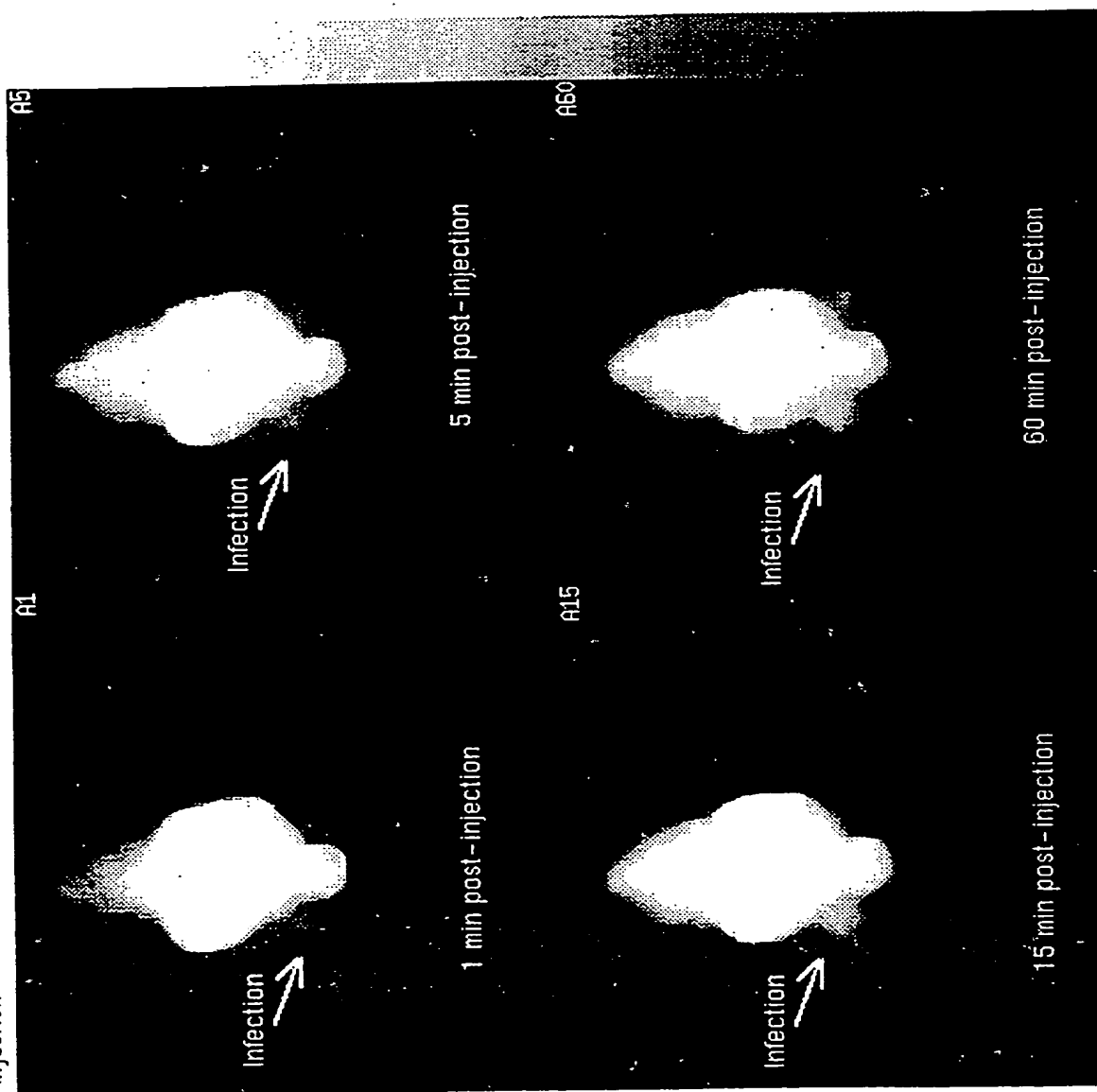


FIG.11

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Accumulation of ^{99m}Tc -labelled peptides in the thigh muscle infected by *Klebsiella pneumoniae* ATCC 43816

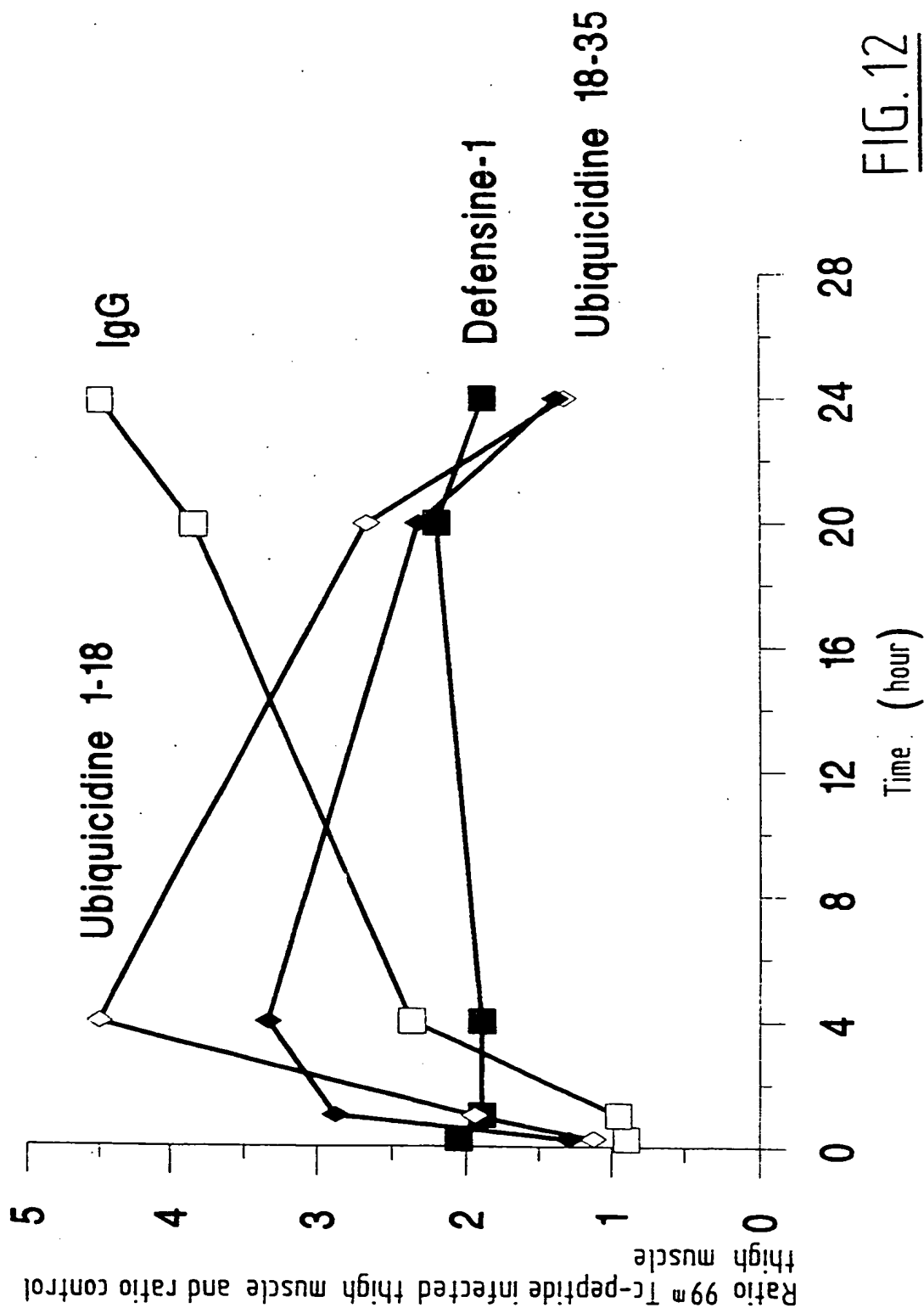
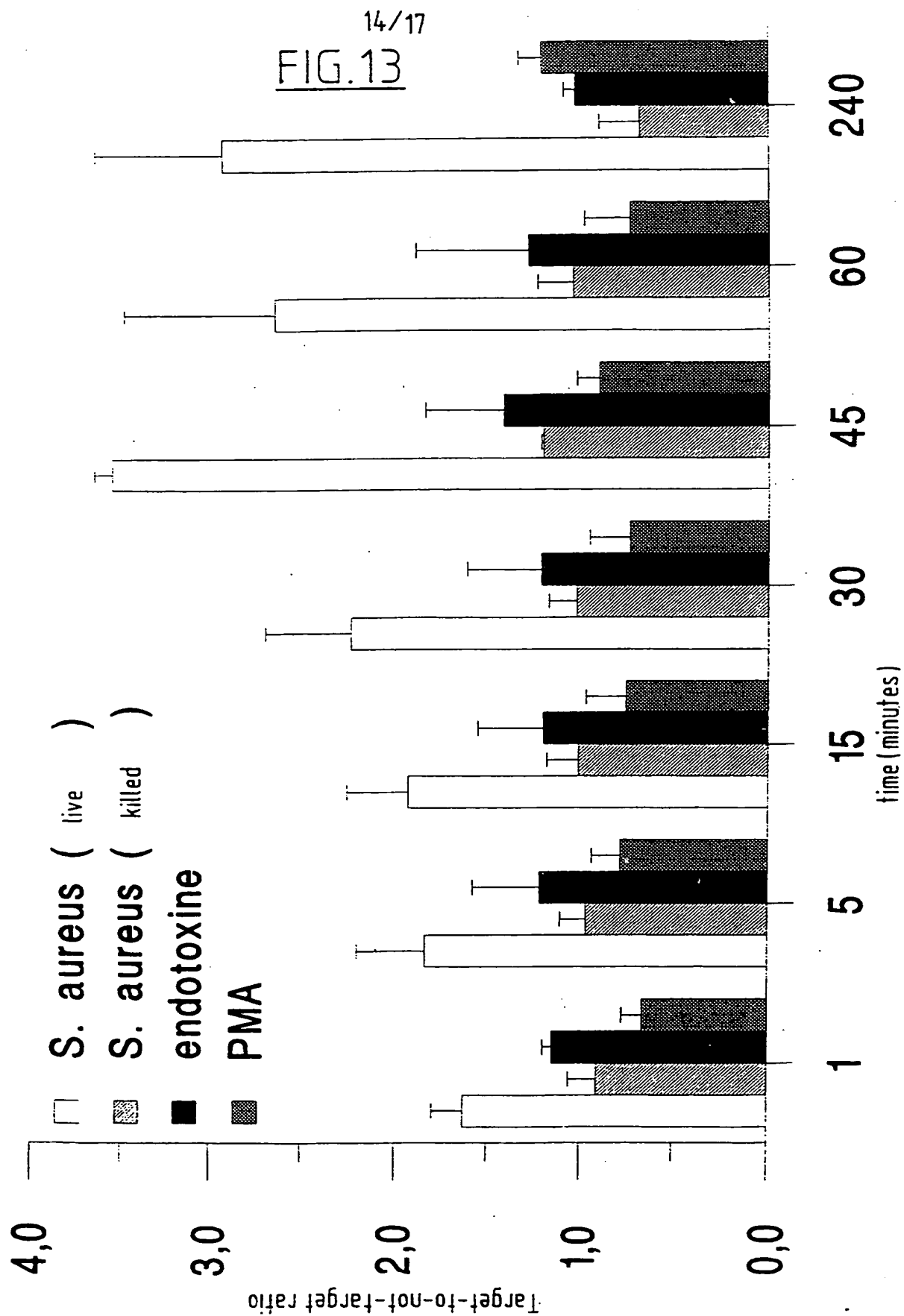
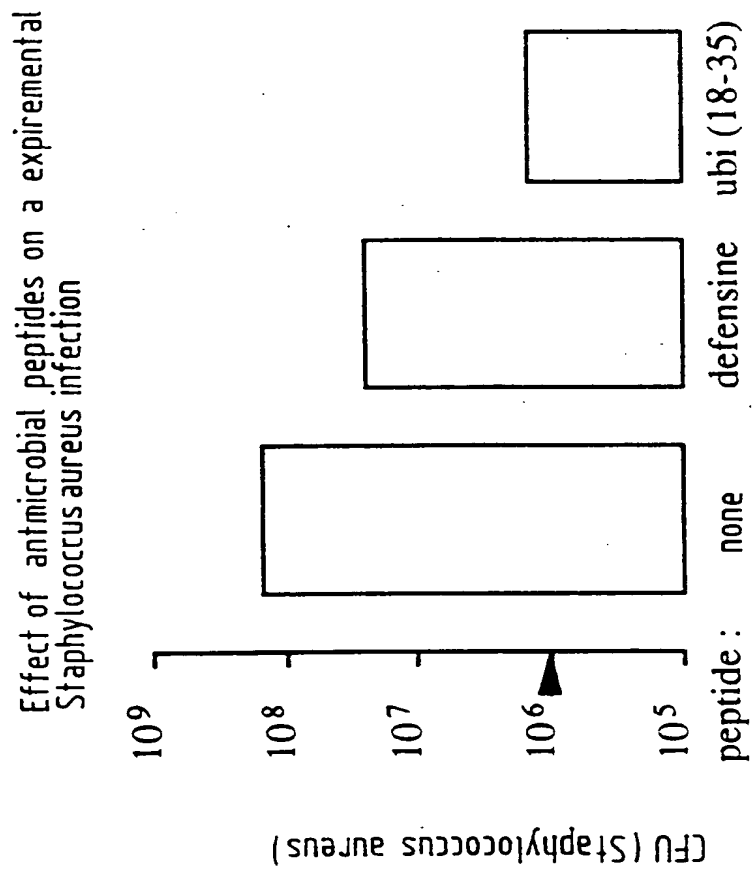


FIG. 12

Accumulation of 99 Tc-labelled ubiquitinidine 18-35 in an infection but not in inflammations



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FIG. 14A

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Effect of antimicrobial peptides on an experimental *Klebsiella pneumoniae* infection

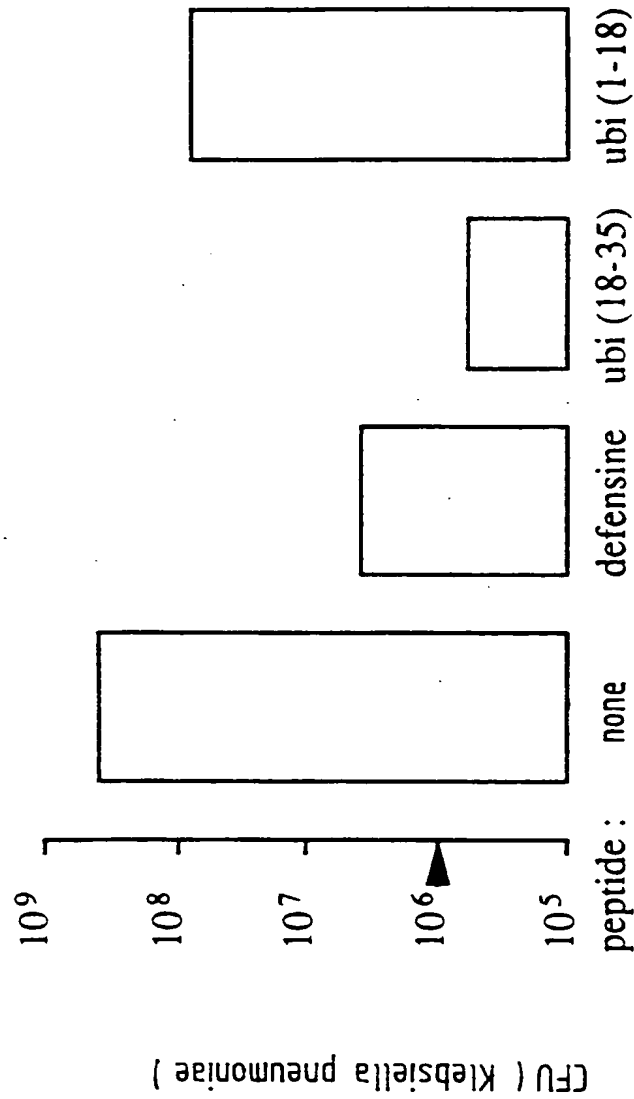
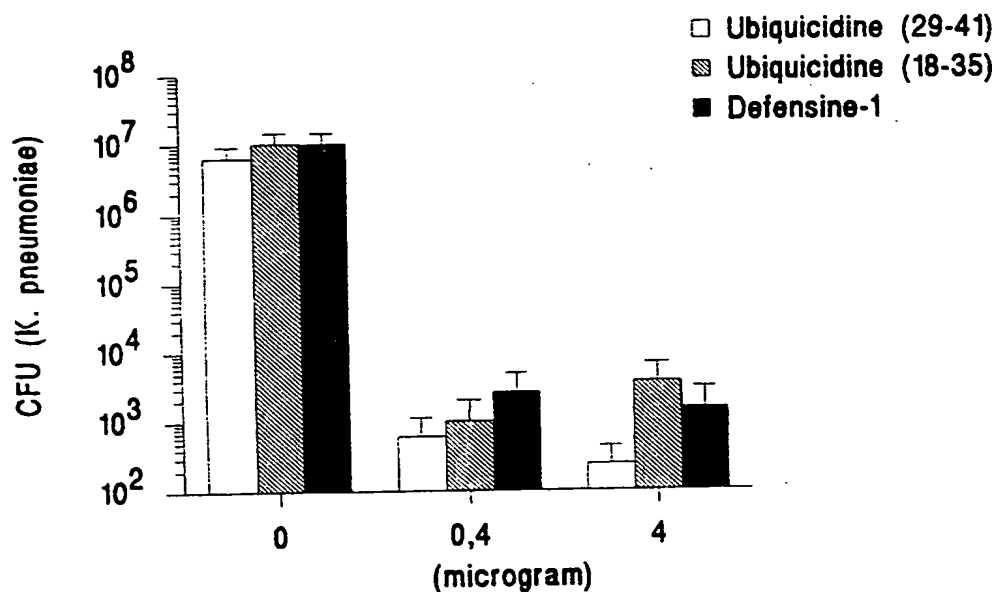


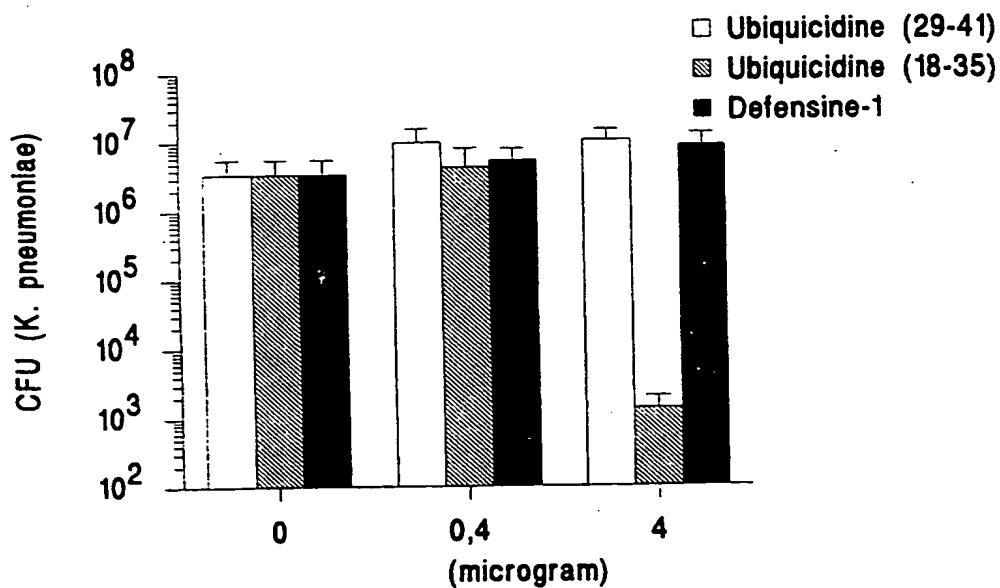
FIG. 14B

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Antimicrobial effect of ubiquidine 29-41 and 18-35 and defensin-1
in mice



Antimicrobial effect of ubiquidine 29-41 and 18-35 and defensin-1
in mice treated with cyclophosphamide

FIG.15